In odor it resembles Salvia Clevelandii, which it also resembles in foliage. It may be readily distinguished from Salvia mellifera by its more compact habit, unbranched inflorescence, the more obovate and smaller leaves and particularly by the conformation of the corolla and stamens which are sometimes scarcely exserted from the corolla tube. Its corollas are uniformly a darker blue. Its flowering period is notably earlier than that of Salvia mellifera, it being in full flower throughout its range in the first part of February. Some bloom apparently holds on, however, until as late as June. I do not believe that it comes in contact with Salvia mellifera. It does, however, frequently meet Salvia apiana and at one such point, on the Sacaton road north of San Vicente, a plant was found, not in flower, which suggested strongly a hybrid with that species. A transplant was made but did not survive.

> University of California at Los Angeles, July, 1935.

NEW OR OTHERWISE NOTEWORTHY NORTH-WESTERN PLANTS-I

LINCOLN CONSTANCE AND LOUIS A. DILLON

Under the heading, "New and Noteworthy Northwestern Plants," Dr. Charles Vancouver Piper, while associated with the State College of Washington, initiated a series of botanical notes dealing with the flora of the Pacific Northwest. The first of these articles appeared in Erythea in 1896 and subsequent papers are to be found in the same journal and in the Bulletin of the Torrey Botanical Club.

This title was revived by Dr. Harold St. John when he was in charge of systematic botany at this institution and he and his students used it as a medium for the publication of a number of novelties between 1928 and 1930. This series has lapsed during the past several years, but it is the intention of the present staff of the Herbarium of the State College to renew it (under the slightly modified title at the head of this article¹) as a vehicle for the publication of critical notes, new distributional data, and the description of new forms.

Since the flora of the Pacific Northwest is of interest alike to systematic botanists and to students of floristic distribution, we feel that any interesting items turned up during study in this herbarium should be made generally available. Of some species, we have uncovered older collections than the ones on

[Vol. 3

¹ Contribution No. 45 from the Botany Department of the State College of Washington.

1935] CONSTANCE AND DILLON: NORTHWESTERN PLANTS 171

which certain published "first records" for Washington are based, and we feel that these facts should be made known.

AGROSTIS INTERRUPTA L. Through the assistance of Mrs. Agnes Chase, of the Bureau of Plant Industry, we are enabled to make a report concerning this relatively recent introduction from Europe. The species was placed in the genus *Apera* by Beauvois, but we find *Agrostis interrupta* to be preferable, and this is the name adopted by Dr. Hitchcock for his forthcoming manual. With the possible exception of a specimen from St. Louis deposited in the Herbarium of the Missouri Botanical Gardens, the first authentic collection in the United States was made by T. A. Bonser in 1922. With this and later collections in this state, we offer the following list:

WASHINGTON. In depression in prairie, near Lidgewood, Spokane Co., June 3, 1922, T. A. Bonser; gravelly loam, in a small kettle left by glacier, Spokane Valley, June 5, 1925, T. A. Bonser 3; dry alkaline flat 3 mi. N. W. of Ewan, Whitman Co., June 7, 1934, F. L. Pickett, J. F. Clarke & L. A. Dillon 1612.

Two other collections have been made in the Pacific Northwest,² the Hutchinson specimen representing the first North American material:

BRITISH COLUMBIA. Okanogan River Basin, Vernon, June 17, 1918, A. H. Hutchinson 3.

OREGON. Ballast, Linnton, Portland, Multnomah Co., June 16, 1925, W. N. Suksdorf 3356.

ERAGROSTIS CILIANENSIS (All.) Link. This introduced European grass, reported from several stations in California, has also appeared in the State of Washington. This new record we owe to Mr. George Neville Jones of the University of Washington who identified one of the following collections and noted its novel character:

WASHINGTON. Rocky coulee, east of Whitstran, Benton Co., Oct. 7, 1929, Leslie Smith 265; Richland, Benton Co., November, 1931, Mrs. E. F. Gaines.

TRILLIUM PETIOLATUM Pursh. In his "Notes on the Flora of the State of Washington—II" (5) Thompson records his no. 6444, obtained in 1931, as the first collection of this species from the central part of the state. His collection is antedated by the following:

WASHINGTON. Moist meadow near road, Leavenworth, Chelan Co., May 18, 1928, H. St. John, W. W. Eggleston, R. G. Beals & F. A. Warren 9484.

BASSIA HYSSOPIFOLIA (Pall.) Kuntze. Tidestrom mentions this chenopodiaceous plant as occurring in "Waste places; near U. S. Experiment Station, Fallon, Nevada. Introduced from western Asia" (6, p. 178). Apparently the species has not been included

² Since this paper was written, the following additional locality has been cited in A. S. Hitchcock's recently published Manual of the Grasses of the United States: "Idaho (Nezperce Forest)."

in any other North American flora. In habit it approaches *Dondia* and related genera, but may be easily distinguished by the presence of conspicuous hooked appendages on the calyx. The species has recently appeared as an adventive weed in Benton and Okanogan counties and may now be added to the flora of the state:

WASHINGTON. Alkali ground, Prosser, Benton Co., Sept. 2, 1929, Leslie Smith 104; growing in strong alkali ground along highway between Omak and Okanogan, Okanogan Co., Sept. 15, 1933, Chas. B. Fiker 1426; generally, in orchards and along highway near Tonasket, Okanogan Co., Sept. 8, 1934, F. L. Pickett 1673.

SAXIFRAGA OPPOSITIFOLIA L. Although this attractive alpine plant has long been known to occur in Alaska, British Columbia, and Wyoming, it has, apparently, never been reported from this state. A collection made by Mr. Helmrich in the Olympic Mountains and distributed by Mr. J. W. Thompson will doubtless be published by the latter, but the station noted below is so far removed from the Olympic Peninsula that it is also worthy of record:

WASHINGTON. Limestone ledges, alt. 4000 ft., Twin Lakes, Winchester Mountain, Whatcom Co., Sept. 7, 1927, H. St. John 8937.

ASTRAGALUS ALPINUS (L.) Sheldon and A. MACOUNII Rydberg. Astragalus alpinus was first reported (under Phaca) from the State of Washington by Piper (2, p. 371), on the basis of a single collection by Whited, in Okanogan County. No additional localities have been reported from the state. A. Macounii was stated by M. E. Jones (1, p. 135), who treated it as A. labradoricus DC. var. occidentalis (Wats.) Jones, to occur "as far westward as Upper Marias Pass in Montana and Oroville [Okanogan Co.] in the Cascades, Washington." This species was later collected, also in Okanogan County, by Eggleston.

This herbarium has recently received several specimens of Astragalus, section Atelophragma, from the same part of the state, and the attempt to identify them has led to a re-examination of the old material assigned to these two species, as well as to an intensive study of the new. The species are not dissimilar in general characteristics, except that Astragalus Macounii is larger in most structures. In fact there seems to be considerable confusion of opinion as to what the distinguishing characters are. Apparently, the truly critical difference is to be found in the morphology of the pod of the two species. Astragalus Macounii has a pod in which neither suture is sulcate, but the dorsal (upper) has a narrow inflexed edge. In A. alpinus the ventral (lower) suture is sulcate, while the dorsal has no intrusion what-Segregation of the specimens at hand on this basis soever. shows that Whited's specimen has heretofore been assigned to the wrong species and is actually A. Macounii. Since this has

been the only specimen to substantiate the occurrence of A. alpinus in Washington, the following recent collection constitutes the first authentic record reported for the state:

Moses Meadows, Okanogan Co., July 4, 1933, WASHINGTON. Chas. B. Fiker 1222.

As material of Astragalus Macounii, we may now list the following:

WASHINGTON. Damp thicket, Conconnully [Okanogan Co.], July 22, 1900, K. Whited 1307; Tamarack Camp, above Hidden Lakes, Okanogan Forest, Okanogan Co., 2150 m., Aug. 8-10, 1916, W. W. Eggleston 13440; flowers lavender, open woods, Riverside, Okanogan Co., July 1, 1933, H. St. John 7721; near swamp in damp ground near summit Tonasket-Republic highway, alt. 4000 ft., July 4, 1934, Chas. B. Fiker 1521.

OXYTROPIS DEFLEXA (Pall.) DC. In his recent paper, "A Revision of the Loco-weeds of Washington" (3), St. John allowed a total of five species for the state, four of which were new. It is due to the energetic efforts of an enthusiastic amateur col-lector of north central Washington, Mr. Charles B. Fiker, that we are now able to add another species to this list. All of the species credited to the state by St. John fall into the section Campestres of Rydberg's treatment in his Flora of the Rocky Mountains, while O. deflexa belongs to the section Deflexi, distinguished by conspicuously pendent pods. The specimen is, we believe, the first record of the species west of the Rocky Mountains, and represents a very remarkable extension in range:

WASHINGTON. In an abandoned field one mile north of Old Waucanda, Okanogan Co., Aug. 18, 1933, Chas. B. Fiker 1389.

HYOSCYAMUS NIGER L. In an earlier paper, Thompson (4) has recorded his 1931 collection of this species in Okanogan County as the first record and station for the state. Among the unidentified material in the Herbarium of the State College was discovered the following, collected eight years earlier:

WASHINGTON. Abundant in old sawmill clearing, Riverside, Okanogan Co., July 1, 1923, H. St. John 7723.

> Herbarium of the State College, Pullman, Washington, March 4, 1935.

LITERATURE CITED

- 1. JONES, M. E. Revision of North-American species of Astragalus. Salt Lake City. 1923.
- 2. PIPER, C. V. Flora of the state of Washington. Contr. U. S. Nat. Herb.
- 11: 1-637. 1906. St. John, H. A revision of the loco-weeds of Washington. Proc. Biol. Soc. Wash. 41: 97-106. 1928. 3.
- THOMPSON, J. W. Notes on the flora of the state of Washington-I. 4. Rhodora 34: 236-239. 1932.
- 5. Notes on the flora of the state of Washington-II. Rhodora 36: 8-13. 1934.
- 6. TIDESTROM, I. Flora of Utah and Nevada. Contr. U. S. Nat. Herb. 25: 1-665. 1925.